



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

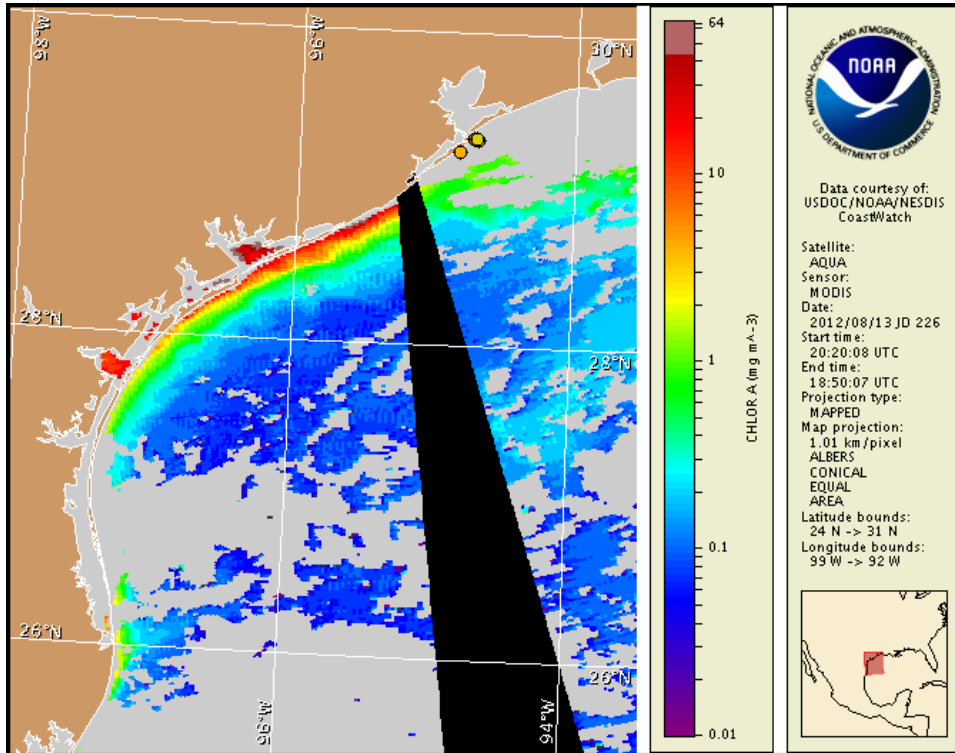
Thursday, 16 August 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 13, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 6 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

A harmful algal bloom of *Karenia brevis* is present along the Texas coast, in the Galveston region. In the Galveston area, patchy high impacts are possible today, with patchy moderate impacts possible Friday through Sunday. No additional impacts are expected at the coast in Texas today through Sunday, August 19. Reports of dead fish were received from alongshore the Galveston/Freeport region earlier this week. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

## Analysis

A harmful algal bloom of *Karenia brevis* has been identified at various locations within Galveston Bay. The most recent samples confirmed the presence of *K. brevis* from Houston Ship Channel markers 16, 25, 35, 47 and 55, the east end of the seawall, and at both ends of the south San Luis Pass jetty (8/13; TPWD, TDSHS). Dead fish were also reported from alongshore the Galveston region (8/13, TPWD). There is no indication of the presence of *K. brevis* in the Port Aransas, Corpus Christi, and South Padre Island areas (8/15, TPWD).

Recent MODIS imagery (8/13; shown left) is partially obscured by clouds along- and off-shore from the Sabine Pass region to the Galveston region and from the Aransas Pass to South Padre Island region, limiting analysis. A patch of elevated to very high chlorophyll (3 to >20  $\mu\text{g/L}$ ) is visible stretching along- and offshore the Freeport to Aransas Pass region. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and could also be an artifact of clouds in the imagery or due to the resuspension of benthic chlorophyll and sediments along the coast.

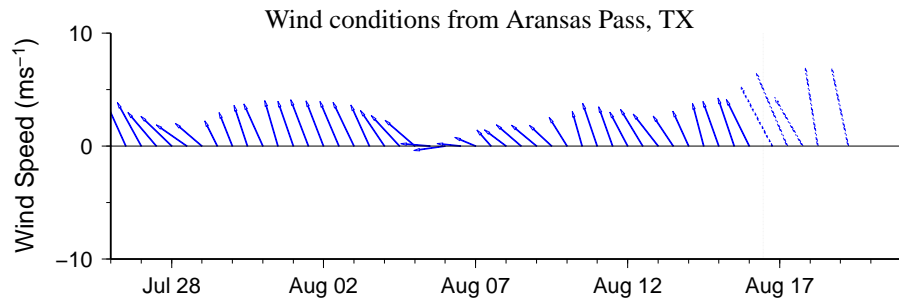
Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 60 km north from the Galveston region and a potential transport of 60 km north from the Port Aransas region from August 13-19.

Kavanaugh, Derner, Davis

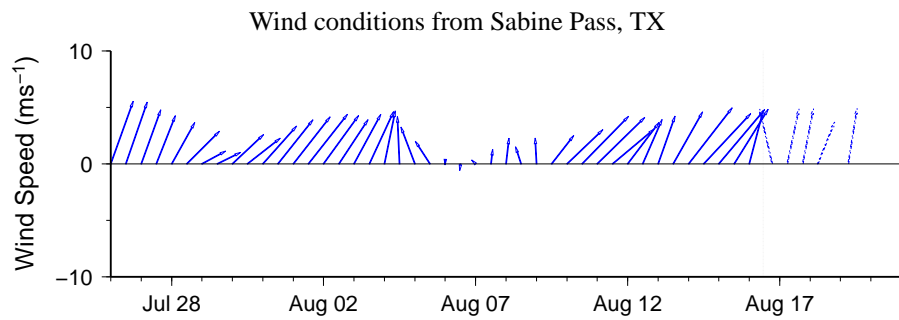
## Wind Analysis

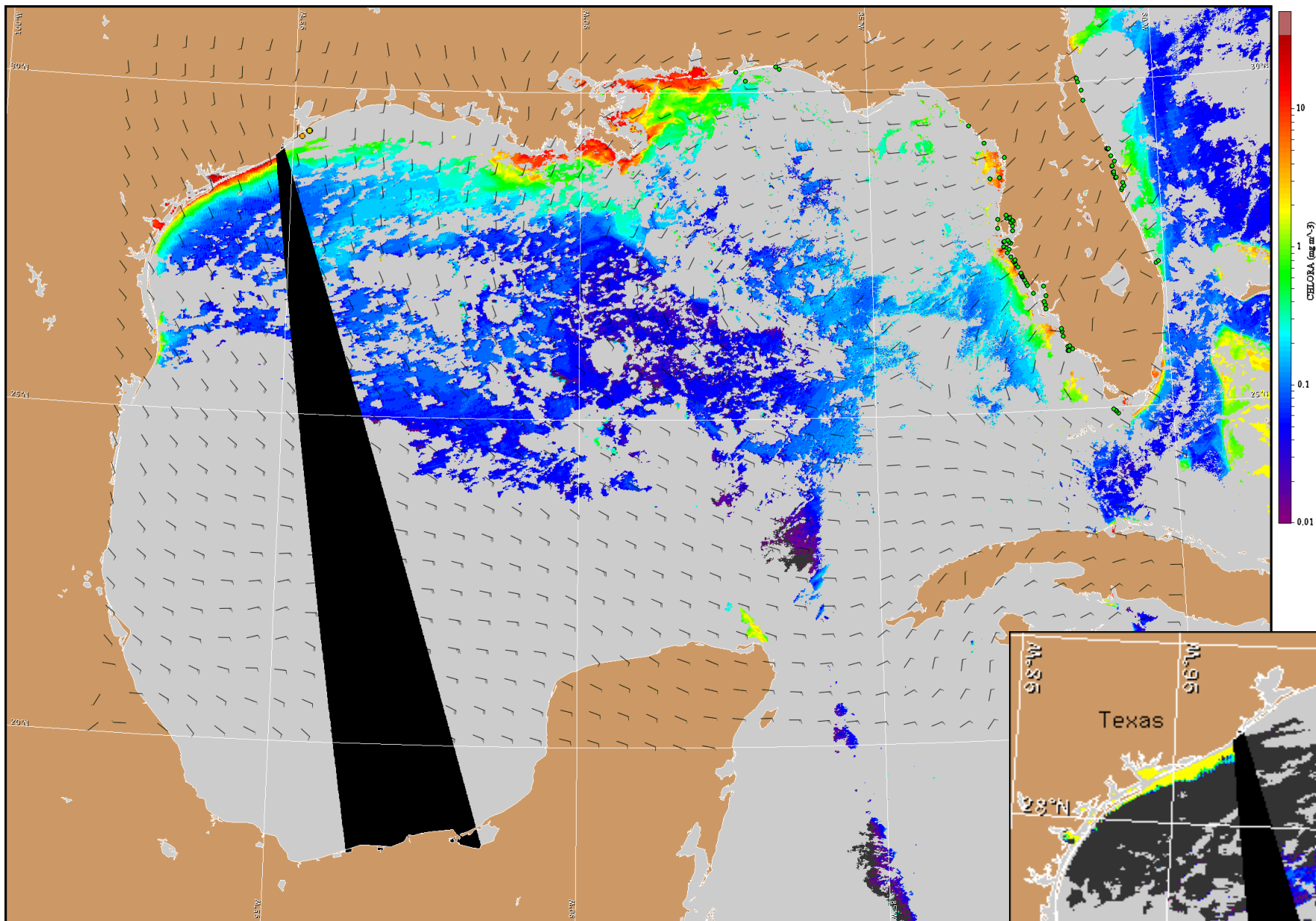
**Port Aransas:** Southeast winds (10-15 kn, 5-8 m/s) today. South winds (5-15 kn, 3-8 m/s) Friday becoming southeast winds (5-15 kn) Saturday afternoon through Sunday.

**Galveston:** South winds (5-20 kn, 3-10 m/s) today through Sunday. Southeast winds (5-10 kn, 3-5 m/s) Sunday afternoon through evening.



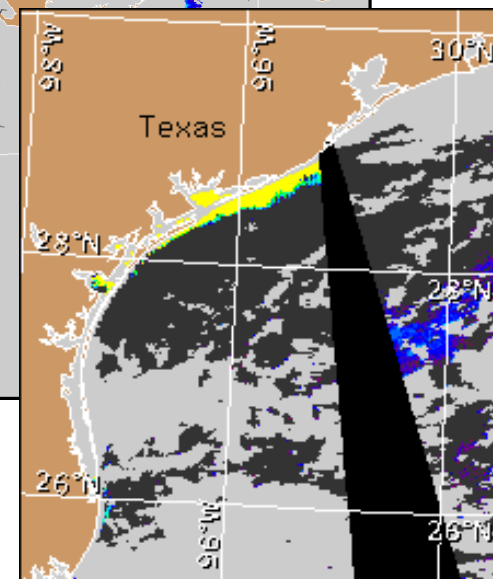
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).





Satellite chlorophyll image and forecast winds for August 17, 2012 06Z with cell concentration sampling data from August 6 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).